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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,307	04/13/2005	Kenji Suzuki	270484USPCT	6324
22850 7590 09/04/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER MULLIS, JEFFREY C	
			ART UNIT 1711	PAPER NUMBER
			NOTIFICATION DATE 09/04/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/531,307

Applicant(s)

SUZUKI ET AL.

Examiner

Jeffrey C. Mullis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12-12-05</u> .  | 6) <input type="checkbox"/> Other: _____                          |

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The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear if applicants claims require softener given that the softener is recited to be present at a level of less than 0.5 parts based on a, b, and c.

It is not clear what materials are excluded by the term "essentially comprises" in that "comprises" is open language, while "essentially" implies something more limited.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (US 6,414,059).

Patentees disclose a composition containing up to 55% block copolymer, 0-40% softener and 5-80% acrylate rubber. Note the paragraph bridging columns 4 and 5. The aromatic block may be formed from vinyl toluene at column 9, lines 40-45. Since the

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composition of the patent and instant claims are similar, similar characteristics are assumed inherent.

There are no examples in the patent of compositions having the specific combination of limitations of applicants although such falls within the broad ambit of the patent. Hence to choose applicants combination of materials from the patent would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of adequate results, absent any showing of surprising or unexpected results.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khandpur et al. (US 2006/0177652).

Khandpur et al. discloses a composition containing a block copolymer having a conjugated diene block of molecular weight of 1000 to 500,000 and a styrenic block of molecular weight of 1,000 to 50,00 which may include those formed from 3-methyl styrene blocks (paragraph 23). Since the composition of the patent and instant claims are similar, similar characteristics are assumed inherent.

There are no examples in Khandpur et al. of compositions possessing all of applicants limitations in combination although the disclosure of patentees falls within the broad ambit of the claims in that by choosing from the ranges and species discloses to be useful by Khandpur et al. it is possible to arrive at applicants composition. Hence to arrive at applicants composition by selecting from the disclosure to Khandpur et al. would have been obvious to a practitioner having an ordinary skill in the art at the time

of the invention in the expectation of adequate results absent any showing of surprising or unexpected results.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroy (JP 11-246733) in view of Foss (US 3679776) or Zucchini (US005219961A) or Erickson et al (US006525142B1) or Chemical Marketing reporter.

Hiroy discloses a composition containing a thermoplastic and a block copolymer having an aromatic block which may include p-methylstyrene. Note the abstract. The thermoplastics include acrylates such as PMMA and methylmethacrylate-styrene copolymer at paragraph 17 and preferably the ratio of block copolymer to thermoplastic may be as high as 50:50 at paragraph 25, within the metes and bounds of the claims. Block copolymer molecular weights and aromatic monomer contents are disclosed at paragraphs 29 and 32 and are such as to meet the limitation of applicants' component "a". Plasticizers are disclosed in paragraph 50, although useful amounts are not. The non aromatic blocks include dienes at paragraph 47. Since the composition of the patent and instant claims are similar, similar characteristics are assumed inherent.

Applicants claims are limited to conjugated dienes while Tomoki does not specifically disclose that his dienes are conjugated.

Erickson discloses that butadiene is used as diene in a diene containing polymer due to low cost and availability (column 3, lines 13-20) while Foss at column 2, lines 43-46 has

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a similar disclosure for butadiene and isoprene as does Zucchini at column 4, lines 10-15.

Chemical Market Reporter indicates that butadiene is the cheapest polymerizable commodity petrochemical (see the last column).

With re to the use of applicants amounts of plasticizer, applicants claims do not require plasticizer at all given that the plasticizer is recited to be present at a level of less than 0.5 parts based on a, b, and c. However to find the optimum or workable amount of plasticizer would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in that it requires only routine experimentation to fine the optimum or workable range of a result effective variable, absent any showing of surprising or unexpected results. There are no examples in the patent of compositions having the specific combination of limitations of applicants although such falls within the broad ambit of the patent. However, to choose applicants combination of materials from the patent would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of adequate results, absent any showing of surprising or unexpected results.

With re to use of butadiene or isoprene of the diene in the primary reference, to do so would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of extending the advantages of the secondary reference to the primary reference such as low cost and availability absent any showing of surprising or unexpected results.

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Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chundry et al. (US 5,317,059).

Patentees disclose a blend containing an acrylate polymer "III" (Abstract) and a block copolymer may contain butadiene and alkylstyrene monomer. The material is abrasion resistant at column 8, lines 26-55 and therefore presumed to have applicants characteristics of claim 2.

There are no examples in the patent of compositions having the specific combination of limitations of applicants although such falls within the broad ambit of the patent. Hence to choose applicants combination of materials from the patent would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of adequate results, absent any showing of surprising or unexpected results.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 2 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 7,247,674. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of the two sets of claims overlap.

Any inquiry concerning this communication should be directed to Jeffrey C. Mullis  
M-F, 9-5 pm at telephone number 571 272 1075.

Jeffrey C. Mullis  
Primary Examiner  
Art Unit 1711

JEFFREY C. MULLIS  
PRIMARY EXAMINER  
GROUP 1200 1711  
